## WHAT IS CLAIMED IS:

1. A compound of formula (La) or (Lb):

$$\mathbb{R}^{3a}$$
O

 $\mathbb{R}^{4a}$ 
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wherein:

R<sup>1</sup> and R<sup>2</sup> are the same or different and each represents a hydrogen atom or an amino protecting group;

R<sup>3a</sup> represents a hydrogen atom or a hydroxy protecting group or when R<sup>1</sup> is a hydrogen atom; R<sup>2</sup> and R<sup>3a</sup> taken together form a group of formula –(C=O)-;

 $R^{4a}$  represents a  $C_1$ - $C_{20}$  alkyl group, a  $C_2$ - $C_{20}$  alkyl group interrupted with a heteroatom(s), a  $C_1$ - $C_{20}$  alkyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{20}$  alkynyl group group, a  $C_3$ - $C_{20}$  alkynyl group interrupted with a heteroatom(s), a  $C_2$ - $C_{20}$  alkenyl group, a  $C_3$ - $C_{20}$  alkenyl group, a  $C_3$ - $C_{20}$  alkenyl group interrupted with a heteroatom(s), a  $C_2$ - $C_{20}$  alkenyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{20}$  alkyl group which is substituted with an aryl group(s) or a heteroaryl group(s) and interrupted with a heteroatom(s), or a cycloalkyl group; m represent an integer from 0 to 4;

Ar represents an aryl group, a heteroaryl group, an aryl group substituted with 1 to 5 substituents selected from substituent group a, a heteroaryl group substituted with 1 to 5 substituents selected from substituent group a, with the proviso that when Ar is an aryl group, R<sup>1</sup> is not a hydrogen atom and R<sup>2</sup> and/or R<sup>3a</sup> do not represent a hydrogen atom; wherein substituent group a represents a halogen atom, a lower alkyl group, a halogenated lower alkyl group, a lower alkoxy group, a lower alkylthio group, a carboxyl group, a lower alkoxycarbonyl group, a hydroxyl group, a lower aliphatic acyl group, an amino group, a lower mono-alkylamino group, a lower di-alkylamino group, a lower aliphatic acylamino group, and a nitro group.

- 2. A compound according to claim 1 wherein said compound has a formula (La).
- 3. A compound according to claim 1 or 2 wherein R<sup>1</sup> is a hydrogen atom.

- 4. A compound according to claim 1 or 2 wherein R<sup>2</sup> and R<sup>3a</sup> taken together form a group of formula -(C=O)-.
- 5. A compound according to claim 1 or 2 wherein R<sup>3a</sup> is a hydrogen atom.
- 6. A compound according to claim 1 or 2 wherein  $R^{4a}$  is a  $C_1$ - $C_{10}$  alkyl group, a  $C_2$ - $C_{10}$  alkyl group interrupted with a heteroatom(s), a  $C_1$ - $C_{10}$  alkyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkynyl group, a  $C_3$ - $C_{10}$  alkynyl group interrupted with a heteroatom(s), a  $C_2$ - $C_{10}$  alkynyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkenyl group, a  $C_3$ - $C_{10}$  alkenyl group interrupted with a heteroatom(s), a  $C_2$ - $C_{10}$  alkenyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkyl group which is substituted with an aryl group(s) or a heteroaryl group(s) and interrupted with a heteroatom(s), or a  $C_5$ - $C_{10}$  cycloalkyl group.
- 7. A compound according to claim 1 or 2 wherein  $R^{4a}$  is a  $C_1$ - $C_{10}$  alkyl group, a  $C_2$ - $C_{10}$  alkyl group interrupted with a heteroatom(s), a  $C_1$ - $C_{10}$  alkyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkynyl group, a  $C_2$ - $C_{10}$  alkenyl group, or a  $C_5$ - $C_{10}$  cycloalkyl group.
- 8. A compound according to claim 1 or 2 wherein R<sup>4a</sup> is a C<sub>1</sub>-C<sub>10</sub> alkyl group.
- 9. A compound according to claim 1 or 2 wherein  $R^{4a}$  is a  $C_1$ - $C_6$  alkyl group.
- 10. A compound according to claim 1 or 2 wherein R<sup>4a</sup> is a methyl group or an ethyl group.
- 11. A compound according to claim 1 or 2 wherein Ar is a phenyl, furyl, thienyl, benzothienyl group, or a phenyl, furyl, thienyl, or benzothienyl group, said groups optionally being substituted with 1 to 4 substituents selected from substituent group a.
- 12. A compound according to claim 1 or 2 wherein Ar is a thienyl group or a thienyl group substituted with 1 to 4 substituents selected from substituent group a.

- 13. A compound according to claim 1 or 2 wherein Ar is a benzothienyl group or a benzothienyl group substituted with 1 to 4 substituents selected from substituent group a.
- 14. A compound according to claim 1 or 2 wherein m is 0 or 1.
- 15. A compound according to claim 1 or 2 wherein substituent group a is a halogen atom, a hydroxyl group, a lower alkyl group, a halogenated lower alkyl group, a lower alkoxy group, a carboxyl group, a lower aliphatic acyl group, a lower aliphatic acylamino group, an amino group, a cyano group, or a nitro group.
- 16. A compound according to claim 1 or 2 wherein

R<sup>1</sup> is a hydrogen atom;

R<sup>2</sup> and R<sup>3a</sup> taken together form a group of formula –(C=O)-;

R<sup>3a</sup> is a hydrogen atom;

 $R^{4a}$  is a  $C_1$ - $C_{10}$  alkyl group, a  $C_2$ - $C_{10}$  alkyl group interrupted with a heteroatom(s), a  $C_1$ - $C_{10}$  alkyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkynyl group, a  $C_3$ - $C_{10}$  alkynyl group interrupted with a heteroatom(s), a  $C_2$ - $C_{10}$  alkynyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkenyl group, a  $C_3$ - $C_{10}$  alkenyl group interrupted with a heteroatom(s), a  $C_2$ - $C_{10}$  alkenyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkyl group which is substituted with an aryl group(s) or a heteroaryl group(s) and interrupted with a heteroatom(s), or a  $C_5$ - $C_{10}$  cycloalkyl group; m is 0 or 1;

Ar is a phenyl, furyl, thienyl, benzothienyl group, or a phenyl, furyl, thienyl, or benzothienyl group, said groups optionally being substituted with 1 to 4 substituents selected from substituent group a; and

substituent group a is a halogen atom, a hydroxyl group, a lower alkyl group, a halogenated lower alkyl group, a lower alkoxy group, a carboxyl group, a lower aliphatic acyl group, a lower aliphatic acylamino group, an amino group, a cyano group, or a nitro group.

17. A compound according to claim 16 wherein

 $R^{4a}$  is a  $C_1$ - $C_{10}$  alkyl group, a  $C_2$ - $C_{10}$  alkyl group interrupted with a heteroatom(s), a  $C_1$ - $C_{10}$  alkyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkynyl group, a  $C_2$ - $C_{10}$  alkenyl group, or a  $C_5$ - $C_{10}$  cycloalkyl group; and

Ar is a thienyl group or a thienyl group substituted with 1 to 4 substituents selected from substituent group a.

18. A compound according to claim 16 wherein

R<sup>4a</sup> is a C<sub>1</sub>-C<sub>10</sub> alkyl group; and

Ar is a benzothienyl group or a benzothienyl group substituted with 1 to 4 substituents selected from substituent group a.

19. A compound according to claim 16 wherein

R<sup>4a</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group; and

Ar is a benzothienyl group or a benzothienyl group substituted with 1 to 4 substituents selected from substituent group a.

20. A compound according to claim 18 wherein

R<sup>4a</sup> is a methyl group or an ethyl group; and

Ar is a benzothienyl group or a benzothienyl group substituted with 1 to 4 substituents selected from substituent group a.

21. A compound according to claim 18 wherein

R<sup>1</sup> is a hydrogen atom;

R<sup>2</sup> and R<sup>3a</sup> taken together form a group of formula –(C=O)-;

R<sup>3a</sup> is a hydrogen atom;

R<sup>4a</sup> is a methyl group or an ethyl group;

Ar is a benzothienyl group or a benzothienyl group substituted with 1 to 4 substituents selected from substituent group a.

22. A process for the preparation of a compound of a formula (XLIVa) or (XLIVb)

$$R^{11}$$
 OH  $R^{4a}$  OH  $R^{11}$  OH  $R^{1}$   $R^{2}$   $R^{11}$   $R^{1}$   $R^{2}$   $R^{11}$   $R^{1}$   $R^{2}$   $R^{11}$   $R^{1}$   $R^{2}$   $R^{11}$   $R^{11}$ 

wherein:

R<sup>1</sup> and R<sup>2</sup> are the same or different and each represents a hydrogen atom or an amino protecting group; R<sup>4a</sup> represents a C<sub>1</sub>-C<sub>20</sub> alkyl group, a C<sub>2</sub>-C<sub>20</sub> alkyl group interrupted with a

heteroatom(s), a  $C_1$ - $C_{20}$  alkyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{20}$  alkynyl group, a  $C_3$ - $C_{10}$  alkynyl group interrupted with a heteroatom(s), a  $C_2$ - $C_{20}$  alkynyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{20}$  alkenyl group, a  $C_3$ - $C_{20}$  alkenyl group interrupted with a heteroatom(s), a  $C_2$ - $C_{20}$  alkenyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{20}$  alkyl group which is substituted with an aryl group(s) or a heteroaryl group(s) and interrupted with a heteroatom(s), or a cycloalkyl group; and

 $R^{11}$  has the same meaning as that indicated above for  $R^{4a}$ ;

which process comprises the selective acylation of one hydroxyl group of a 2-substituted 2-amino-1,3-propanediol derivative of formula (XLII)

(wherein R<sup>1</sup>, R<sup>2</sup> and R<sup>4a</sup> are as defined above)

with a carboxylic acid ester derivative of formula (XLIII)

R<sup>11</sup>COOCH=CH<sub>2</sub> (XLIII)

(wherein R<sup>11</sup> is as defined above)

in the presence of a lipase to afford a 2-substituted 2-amino-1,3-propanediol mono-ester derivative of formula (XLIVa) or (XLIVb).

- 23. A process for preparation according to claim 22 wherein one of  $R^1$  and  $R^2$  is a hydrogen atom and the other one is an amino protecting group.
- 24. A process for preparation according to claim 22 or 23 wherein  $R^{4a}$  is a  $C_1$ - $C_{10}$  alkyl group, a  $C_2$ - $C_{10}$  alkyl group interrupted with a heteroatom(s), a  $C_1$ - $C_{10}$  alkyl group substituted with an aryl group(s) or a heteroatom(s), a  $C_2$ - $C_{10}$  alkynyl group, a  $C_3$ - $C_{10}$  alkynyl group interrupted with a heteroatom(s), a  $C_2$ - $C_{10}$  alkynyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkenyl group, a  $C_3$ - $C_{10}$  alkenyl group interrupted with a heteroatom(s), a  $C_2$ - $C_{10}$  alkenyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkyl group which is substituted with an aryl group(s) or a heteroaryl group(s) and interrupted with a heteroatom(s), or a  $C_5$ - $C_{10}$  cycloalkyl group.

- 25. A process for preparation according to claim 22 or 23 wherein  $R^{4a}$  is a  $C_1$ - $C_{10}$  alkyl group, a  $C_2$ - $C_{10}$  alkyl group interrupted with a heteroatom(s), a  $C_1$ - $C_{10}$  alkyl group substituted with an aryl group(s) or a heteroaryl group(s), a  $C_2$ - $C_{10}$  alkynyl group, a  $C_2$ - $C_{10}$  alkenyl group, or a  $C_5$ - $C_{10}$  cycloalkyl group.
- 26. A process for preparation according to claim 25 wherein  $R^{11}$  is a  $C_1$ - $C_{20}$  alkyl group, or a  $C_1$ - $C_{20}$  alkyl group substituted with an aryl group(s) or a heteroaryl group(s).
- 27. A process for preparation according to claim 24 wherein  $R^{11}$  is a  $C_1$ - $C_{20}$  alkyl group, or a  $C_1$ - $C_{20}$  alkyl group substituted with an aryl group(s) or a heteroaryl group(s).
- 28. A process for preparation according to claim 22 or 23 wherein  $R^{11}$  is a  $C_1$ - $C_{20}$  alkyl group, or a  $C_1$ - $C_{20}$  alkyl group substituted with an aryl group(s) or a heteroaryl group(s).